

**REMARKS**

Claims 1-2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Applicants' admitted prior art ("APA"; Figures 8-9 of Applicants' drawings) in view of Tsuda et al. (JP '069). As a preliminary matter, it is noted that the Examiner does not formally reject claims 3-8 in the statement of rejection, but nonetheless refers to them in the body of the rejection. Accordingly, it is assumed that claims 3-8 are not rejected, and the reference thereto on page 5 of the Office Action is simply identifying alleged *general* similarities.

In any event, it is respectfully submitted that JP '069 is not prior art to the present application. Specifically, JP '069 was published on July 19, 2002 whereas the priority document of the present application (i.e., JP 2002-139609) was filed on May 15, 2002. In order to perfect Applicants' claim to foreign priority, attached hereto is a certified English translation of the foreign priority document JP 2002-139609.

Moreover, JP '069 appears to be, at best, cumulative to APA in the use of mask groups A and B (corresponding to masks 54 of APA), but JP '069 does not appear to disclose or suggest an "air layer" notwithstanding the Examiner's reliance on JP '069 for allegedly disclosing an air layer. In this regard, when imposing a rejection under 35 U.S.C. §103, the Examiner is required to point to "page and line" wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

In the instant case, the Examiner does not identify which element of JP '069 allegedly reads on the claimed "air layer," and instead, appears to improperly reference element 116 of USP No. 6,335,546 to Tsuda et al. (there does not appear to be a reference 116 in JP '069) when

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attempting to modify APA with the teachings of JP '069 (*see* last three lines of page 4 of the outstanding Office Action). However, because USP No. 6,335,546 to Tsuda et al. is not included in the statement of rejection, the Examiner can not introduce teachings therefrom in the rejection. Indeed, the Examiner specifically references USP No. 6,335,546 as an allegedly related, *but not relied upon*, prior art patent (*see* middle of page 5 of Office Action).

Nonetheless, upon review of USP No. 6,335,546, it is respectfully submitted that the disclosed structure and arrangement of the cavities 116 are not applicable to the particular arrangement of semiconductor layers of the device of APA. For example, cavities 116 are formed directly on *substrate* 100 as shown in Figure 8 of USP No. 6,335,546. Accordingly, even assuming *arguendo* that the Examiner was to find motivation from the prior art to modify APA with the teachings of USP No. 6,335,546, any proposed combination would not result in the claimed invention. It is therefore respectfully submitted that none of the cited prior art, alone or in combination, disclose or suggest the *combination* of features recited in claim 1.

The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard for establishing obviousness under § 103:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claim 1 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are

contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination. Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

**CONCLUSION**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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